ABSTRACT OF THE DISCLOSURE

A fuel cell system includes fuel cell stacks electrically connected in parallel and supplying a gross current to a load. A controller determines the gross load current, and produces a desired current through the load by adjusting, based on the gross load current, at least one parameter affecting at least one of the inputs to and outputs from the system. This system allows a stack design and its voltage output to be kept constant while stacks are added for increased power.